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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,606	07/09/2002	Stefan Ramseier	004501-653	2997

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EXAMINER

BANGACHON, WILLIAM L

ART UNIT PAPER NUMBER

2635

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/089,606	Applicant(s) RAMSEIER ET AL.	
	Examiner William Bangachon	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-10 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 02 July 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/1/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. In response to applicant's concern regarding USP 5,854,994 not being considered, all references cited in the information disclosure statement (IDS) submitted on 4/1/2002 have been considered by the Examiner.

Specification

2. The Examiner respectfully traverse applicant's arguments that page 8, lines 5-10 of the specification supports the claimed "transmission using different carrier frequencies", in that the specification discloses transmission using different time frames, not different carrier frequencies. There is no indication of frequency diversity or frequency hopping in the specification. Therefore, objection to the specification is maintained in this Office action.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 5 recites, "transmission using different carrier frequencies". This feature lacks antecedent basis.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “transmission using different carrier frequencies” must be shown or the feature(s) canceled from the claim(s). Only transmission of the same frequency with different time frames is shown. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 4 has been amended to correct informalities, therefore the objection to claim 4 is withdrawn.

Response to Arguments

6. Applicant's arguments filed 3/7/2005 have been fully considered but they are not persuasive.

7. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Drucker's tag does not initiate communication with another device [page 7, 3rd paragraph], a sensor that awakens itself [page 7, 4th paragraph; page 8, 4th paragraph]) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case, the claims are broader than what applicant argues.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,539,394 (Cato et al) in view of USP 5,168,263 (Drucker).

In claim 1, Cato et al teach of a method for wireless transmission of data by a sensor unit of a sensor via a communication unit (10) to a base station (21), the method comprising the following sequence {see whole document}:

d) the communication unit awaiting reception of a modulated synchronization signal of the base station [Fig. 6, step 61; Fig. 7, step 101]

e) the communication unit sending a modulated data signal to the base station following a prescribed time after reception of the modulated synchronization signal [Fig. 6, step 67; Fig. 7, steps 105-107] {col. 5, lines 40-47},

f) the communication unit awaiting reception of a modulated acknowledgement signal from the base station [Fig. 6, step 69; Fig. 7, step 109] {col. 6, lines 15-22, 31-41; Fig. 7, step 109},

g) the communication unit transferring from the active mode to the sleep mode in the case of the reception of the modulated acknowledgement signal from the base station [Fig. 7, step 113], and

h) the communication unit sending a modulated data signal again in the case of no reception of the modulated acknowledgement signal and continuing in accordance with step f) {col. 6, lines 20-22}.

Cato et al does not disclose expressly;

a) the communication unit receiving a wake-up signal from the sensor unit,

b) the communication unit transferring from a sleep mode into an active mode.

Drucker is cited in that it teaches of a tag with a motion detector. Upon detection of motion (the communication unit receiving a wake-up signal), the tag awakens from a sleep mode (the communication unit transfers from sleep mode into an active mode). Clearly, when the communication unit becomes active, the receiver becomes active. Drucker teaches that the purpose of said feature is "to preserve power source integrity

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of a tag while at the same time re-awakening tags" {Drucker, col. 1, lines 42-65; col. 2, lines 47-63; col. 4, lines 13-19}. On the other hand, Cato et al is concerned with power requirements in the tags {Cato et al, col. 4, and lines 47-51}. Clearly, a motion detector incorporated with a tag, as taught by Drucker, is desirable in the system of Cato because the tags of Cato can save energy while at a standby state. Therefore, at the time of the invention, it would have been obvious to have a motion detector in the tags of Cato et al for supplying a wake-up signal, as taught by Drucker et al, because this preserves power integrity, to one of ordinary skill in the art.

In claim 2, the method as claimed in claim 1, wherein the communication unit sends the modulated data signal in step e) in a time window that is determined with the aid of an internal clock {Cato et al, col. 9, lines 8-22; Drucker, col. 6, lines 7-29}.

In claim 3, the method as claimed in claim 1, wherein, in the case of a reception of a modulated data signal in a first time window, the base station sends a single modulated acknowledgement signal in a second time window following the first {Cato et al, col. 8, lines 11-22, col. 9, lines 33-40}.

In claim 4, the method as claimed in claim 1, wherein, after the reception of modulated data signals of a plurality of sensors, the base station sends, one after another, modulated acknowledgement signals assigned to these sensors {Cato et al, paragraph-bridging cols. 8 and 9}.

In claim 7, the method as claimed in claim 6, wherein the sensor unit operates on the basis of a capacitive, inductive or photoelectric operating principle or a Hall effect, or on the basis of ultrasound {Drucker et al, paragraph bridging cols. 2 and 3}.

Claim 8 recites a device for practicing the method of claim 1 and therefore rejected for the same reasons.

Claim 9 recites a device for practicing the method of claims 2 and 3, and therefore rejected for the same reasons.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,539,394 (Cato et al) in view of USP 5,168,263 (Drucker), and further in view of USP 6,218,929 (Furuta et al).

In claim 5, Cato et al does not disclose expressly "the modulated data signals and modulated acknowledgement signals are transmitted on different carrier frequencies". Furuta is cited in that it teaches of using dual frequencies for transmission, as claimed, for the purpose of accommodating different types of antennas {Furuta et al, col. 3, lines 35-46, lines 55-62}. Furuta teaches that this feature is desirable because it allows a tag to communicate with an interrogator anywhere in a motor vehicle, whether the tag is outside or inside the vehicle {Furuta et al, col. 3, lines 35-46, and lines 55-62}. Obviously, this feature is desirable in the system of Cato, and would have been obvious in the system of Cato, because Cato is concerned with being able to interrogate all tags

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placed in a cart without having to remove each item from the cart for scanning {Cato, col. 4, lines 21-29}, to one of ordinary skill in the art.

13. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,539,394 (Cato et al) in view of USP 5,168,263 (Drucker), and further in view of USP 5,309,144 (Lacombe et al).

In claim 6, Cato et al does not disclose expressly **“a proximity sensor”**. However, proximity sensors are well known in the art and would have been obvious in the system of Cato et al. As evidenced by Lacombe et al {col. 1, lines 32-54}, proximity sensors are used in security systems for the purpose of detecting intruders {Lacombe, paragraph bridging cols. 2 and 3; col. 4, lines 37-66}. Cato is concerned with reading tags on wildlife on feeding area {Cato, col. 2, lines 37-40}. Obviously, a proximity sensor, as taught by Lacombe, is desirable in the system of Cato to ensure that the tag will awaken when approaching a reader/base station, to one of ordinary skill in the art.

Claim 10 recites a device for practicing the method of claim 6 and therefore rejected for the same reasons.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Examiner Contact Information

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Bangachon whose telephone number is (571)-272-3065. The examiner can normally be reached on 4/4/10.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571)-272-3068. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9314 for regular and After Final formal communications. The examiner's fax number is (571)-273-3065 for informal communications.


Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.


EDWIN C. HOLLOWAY III
PRIMARY EXAMINER


William L. Bangachon
Examiner
Art Unit 2635

July 11, 2005